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Reply

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Reply

Pierre-Alain Clavien · Daniel Dindo

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We appreciate the comments by Cunningham and Kavic [1] regarding our terminology and definition of *intraoperative* adverse events [2]. As they correctly state, our classification was designed to objectively catch *postoperative* complications only, and our definition of a complication does not address intraoperative events.

Cunningham and Kavic made some propositions about what should be considered an *intraoperative* complication. In their definition, unintended intraoperative events that carry a risk for postoperative complications (such as inadvertent enterotomy) should be recorded as “intraoperative complication.” On the other hand, accidental intraoperative events with no risk for further postoperative problems (such as burn to the lateral parietal peritoneum) should be termed a “simple error.” The definition given by Cunningham and Kavic is reasonable and the necessity of some definition in this area is well illustrated by the example of iatrogenic injury of the spleen leading to unintended splenectomy. Such patients have an increased risk for postoperative infection, justifying this intraoperative event to be properly recorded. However, it is very difficult to draw the line between events that expose the patient to additional risk and those that do not and what degree of risk would be significant: 5, 20, 50%? To illustrate this, consider inadvertent but significant bleeding from the spleen that can be controlled by a few stitches and placement of a mesh. Should this be considered an

intraoperative complication because of the risk of postoperative rebleeding? Therefore, we have some doubt about which negative intraoperative events should be recorded as suggested by the authors. Death of a patient is the only exception, of course.

We concur with the authors that complications with the risk for long-term consequences must be recorded. In our classification system, such complications are specifically identified by addition of the suffix “d” [3]. However, we considered only postoperative complications; this may require some adjustments. We would like to take again incidental splenectomy as an example. This qualifies undoubtedly as a significant intraoperative negative event with a definite risk for long-term consequences but does not need special treatment after surgery. Therefore, we would suggest considering such an intraoperative event as a grade Id complication, which follows the principle of our classification scheme [3]. In our opinion, the introduction of intraoperative complications without postoperative morbidity into quality reports does not add much to surgical quality assessment. However, if events during surgery become clinically relevant after surgery, they must be caught as a postoperative complication.

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